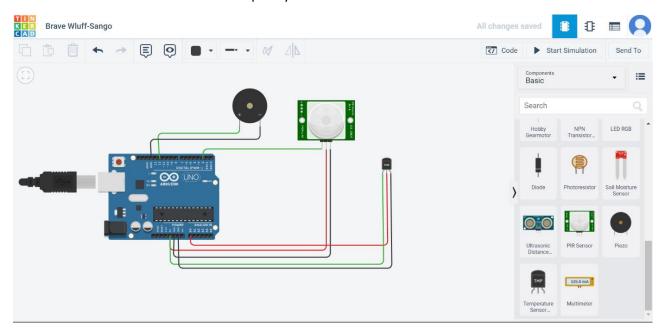
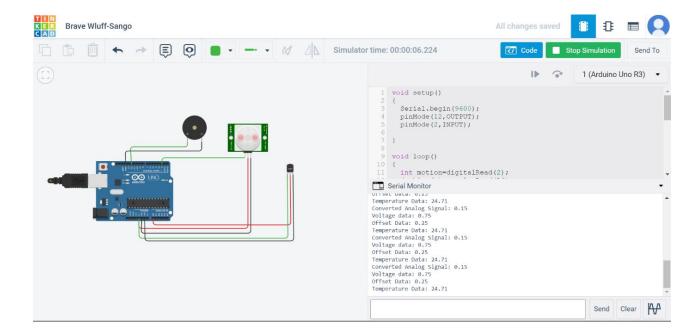
## Home automation

## Circuit with Piezo alarm, PIR sensor, temperature sensor with below functionalities:

- 1. Alarm should sound in one manner if temp is above 60 C
- 2. Alarm should sound with another frequency if motion is detected in PIR sensor.





## Code:

```
void setup()
{
Serial.begin(9600);
pinMode(12,OUTPUT);
pinMode(2,INPUT);
}
void loop()
{
int motion=digitalRead(2);
double data=analogRead(A0);
double n=data/1024;
Serial.print("Converted Analog Signal: ");
Serial.println(n);
double volt=n*5; //denotes connected to 5v
Serial.print("Voltage data: ");
Serial.println(volt);
double off=volt-0.5;
Serial.print("Offset Data: ");
Serial.println(off);
double temperature=off*100;
Serial.print("Temperature Data: ");
Serial.println(temperature);
if(motion==1 && temperature<60)
  tone(12,100);
```

```
else if(motion==0 && temperature>60)
  tone(12,200);
else if(motion==1 && temperature>60)
  noTone(12);
else if(motion==0 && temperature<60)
  noTone(12);
}</pre>
```